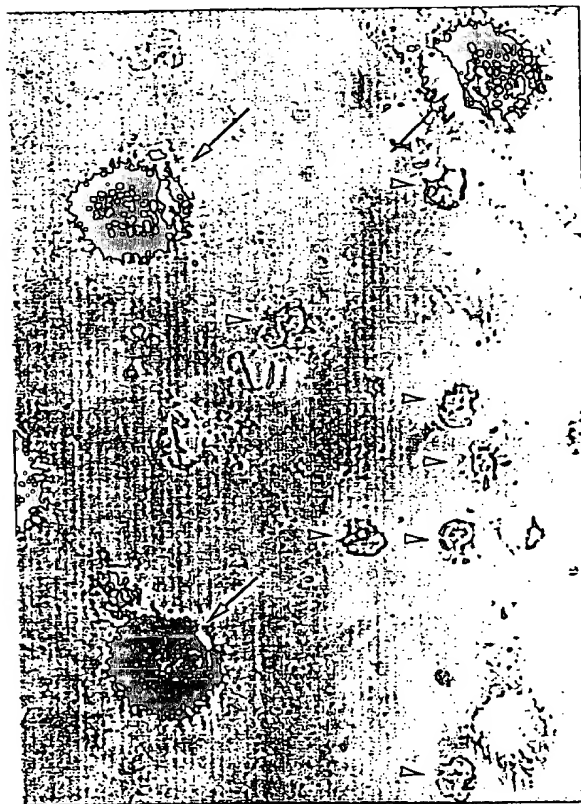


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<b>(21) International Application Number:</b> PCT/US00/08588 <b>(22) International Filing Date:</b> 31 March 2000 (31.03.00) <b>(30) Priority Data:</b> 60/127,367 1 April 1999 (01.04.99) US <b>(71) Applicant (for all designated States except US):</b> THE GOVERNMENT OF THE UNITED STATES OF AMERICA, as represented by THE SECRETARY, DEPARTMENT OF HEALTH AND HUMAN SERVICES [US/US]; National Institutes of Health, Office of Technology Transfer, Suite 325, 6011 Executive Boulevard, Rockville, MD 20852-3804 (US). <b>(72) Inventors; and</b> <b>(75) Inventors/Applicants (for US only):</b> <del>RIED</del> , Thomas [DE/US]; 9819 Parkwood Drive, Bethesda, MD 20814 (US); <del>OHR</del> , Jonathan [US/US]; 12311 Shiremont Drive, Dallas, TX 75230 (US); <del>GHADIMI</del> , Bijan, M. [DE/US]; 4521 Windsor Lane, Bethesda, MD 20814 (US); <del>SCHROCK</del> , Evelin [DE/US]; 13004 Atlantic Avenue, Rockville, MD 20851 (US); <del>AUER</del> , Gert [DE/SE]; Wibomsvag 12, S-171 60 Solná (SE).		<b>(74) Agents:</b> KERBER, Lori, L. et al.; Needle & Rosenberg, P.C., Suite 1200, 127 Peachtree Street, N.E., Atlanta, GA 30303-1811 (US). <b>(81) Designated States:</b> AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, CA, CH, CN, CR, CU, CZ, DE, DK, DM, DZ, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, NO, NZ, PL, PT, RO, RU, SD, SE, SG, SI, SK, SL, TJ, TM, TR, TT, TZ, UA, UG, US, UZ, VN, YU, ZA, ZW, ARIPO patent (GH, GM, KE, LS, MW, SD, SL, SZ, TZ, UG, ZW), Eurasian patent (AM, AZ, BY, KG, KZ, MD, RU, TJ, TM), European patent (AT, BE, CH, CY, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE), OAPI patent (BF, BJ, CF, CG, CI, CM, GA, GN, GW, ML, MR, NE, SN, TD, TG). <b>Published</b> <i>Without international search report and to be republished upon receipt of that report.</i>

**(54) Title:** METHODS FOR DETECTING CANCER CELLS**(57) Abstract**

The invention relates to a highly sensitive assay for distinguishing between cancer and non-cancer epithelial cells in the blood that provides an improved diagnostic technique for detecting cancer and determining the organ-origin of the cancer.



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